Becoming Machinic Virtuosos: *Guitar Hero*, *Rez*, and Multitudinous Aesthetics

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Abstract

Media scholars Greig de Peuter and Nick Dyer-Witheford view digital play as a complex, conflicted site on the terrain of global capital; although seemingly "one-dimensional" diversions in many instances, video games also constitute a space where the virtual can be actualized and where radical subjectivities can be collaboratively improvised (2005a; 2005b). Drawing from de Peuter and Dyer-Witheford's work, this paper explores a gaming trend that has not yet been critically examined – the incorporation by recent titles of musical performance. The wildly popular *Guitar Hero* and the lesser known but critically acclaimed *Rez* serve as examples of digital-musical play; my paper argues that both games offer virtual "lines of flight," however humble.

> "I'm pretty up-front about video games – I play an hour a day. Frankly, I feel more awkward talking about going to the gym [...]. It's called the information age for a reason." (Owen Pallet as cited in Carpenter, 2006)

> "Everything becomes possible the moment one allows the assemblage to escape from energetico-spatio-temporal co-ordinates. And, here again, we need to rediscover a manner of Being – before, after, here and everywhere else – without being, however, identical to itself; a processual, polyphonic Being singularisable by infinitely complexifiable textures, according to infinite speeds which animate its virtual compositions." (Guattari, 1995, p. 51)

Introduction

Recently a handful of indie musicians, working in a variety of different genres, have demonstrated the deep interrelatedness of popular music and digital play. I will list merely a few examples. The highly acclaimed violinist/song-writer Owen Pallet (who illegally performs under the name Final Fantasy, and who fascinatingly began his professional career composing for video games) looked to Dungeons and Dragons (D&D) mythologies and Japanese Role-Playing Games (JRPGs) for inspiration on his latest disc, *He Poos Clouds*. Jim Guthrie used a Playstation game to back up his voice and guitar on his intricately arranged album, *Morning Noon Night*. The post-punk group All-Purpose Voltage Heroes regularly and sincerely incorporate a cover of the theme from Nintendo's *Punchout* into their live show. And in the world of electronica, a recent collection of

Kraftwerk covers called *8-bit Operators* was performed entirely on hacked, vintage 8-bit machines. This rich cross-pollination can also be seen in several recent video games. In titles such as *PaRappa the Rapper*, *Guitar Hero*, and *Rez* – which rely heavily on the hip-hop, rock, and dance music traditions, respectively – "to play" is either to perform, compose, or improvise musical works. Furthermore, underneath these aesthetic and avant-garde exchanges, extensive cross-promotional campaigns have blurred the lines of the game and music industries entirely (*EA Sports'* use of pop music, for example).

Despite all this, music in digital games has been under-examined in the academy. First, aside from Jacob Smith's (2004) study, popular music journals have generally ignored the musicality of video games. Despite the important work being done on the discursive nature of "authenticity" (Keightley, 2000; Moore, 2002), scholars in the discipline tend to look past the industry's own practices of legitimation and exclusion in this regard. Smith's article "I Can See Tomorrow In Your Dance" (2004) is a thoughtful way into one aspect of games and music; here Smith explores the complex relationships between Kareoke culture, the glocalization of hip-hop in Japan, and the popular game *Dance Dance Revolution*. On the other hand, the topic has attracted attention at a few venues for video game scholarship. Robert Bowen (2004) has presented intriguing research on the inherent musical events in Atari 2600 games, which he structurally likens to ersatz jazz compositions. Zach Whalen (2004) has explored how music and sound drive the narrative and ludic dimensions of such games as *Super Mario Bros*. As well, Matthew Belinkie (1999) has offered a survey of the history of music in games, with a focus on 'canonical' composers. These are invaluable contributions to the slowly burgeoning field, but there is much more work to be done.

The current paper will examine one aspect of digital games and music that I see as a novel and necessary way into this fertile area. Robert Bowen has shown, using Atari games as a case study, that to play a video game is to play music. I will explore, then, two recent Playstation 2 titles, *Guitar Hero*[i] and *Rez*, which integrate this truism into their game-play.

It is my objective, however, to go beyond the musicological and semiotic planes of analysis at which much of the work has thus far stopped. Rather than merely analyzing keys, harmonies, or diegetic cues, this paper will tackle what I find to be a more pressing question: how has the performance of musical events been incorporated into digital play? Although the scope here is limited to primarily ludic-aesthetic concerns, the implications will be ethico-political and 'transversal.' Following the groundbreaking lead of Greig de Peuter and Nick Dyer-Witheford (2005a; 2005b), this paper will consider *Guitar Hero* and *Rez* as virtual-aesthetic tools by which the sovereignty of "Empire" (Hardt & Negri, 2000) can be challenged. Through their engagement with the politics of immaterial labour, and through their foregrounding of affected/affecting minds and bodies, these musical games urge the player(s) and audience to grasp the immanence and immeasurableness of human creativity.

Empire, Immaterial Labour, and Machinic Virtuosity

Before analyzing the games themselves, I will briefly explain the theoretical tradition that informs this exploration. "Empire" is the name given by Michael Hardt and Antonio Negri to a qualitatively new paradigm of social control and exploitation that reigns over the postmodern global economy (2000). For the task at hand, the most germane characteristic of the paradigm shift from modern disciplinarity (exemplified by Ford's factories) to postmodern Empire (exemplified by the precarious labour of the networked video game industry [De Peuter & Dyer-Witheford, 2005a]) is the proliferation of modes of increasingly immaterial labour (Hardt & Negri, 2000). The immaterial labourer toils to make not durable goods but immaterial ones, including "services, cultural products, knowledge, and communication" (Hardt & Negri, 2000, p. 290). In other words, much like the avatars of *Guitar Hero*, immaterial labourers *perform* for capital. Paolo Virno's definition of the virtuoso emphasizes the performative aspects of immaterial labour:

> First of all, theirs is *an activity which finds its own fulfillment (that is, its own purpose) in itself*, without objectifying itself into an end product, without settling into a "finished product," or into an object which would survive the performance. Secondly, it is *an activity which requires the presence of others*, which exists only in the presence of an audience. (2004, p. 52)

Although there is a broad spectrum along which various immaterial work falls – from rudimentary data inputting to work in the entertainment industries (Hardt & Negri, 2000) – it necessarily requires the presence of others and finds its own purpose in itself; it is thus inherently performative.

Immaterial labour's primacy in the contemporary global economy is paradoxical. First, the capture of affective, social, and creative labour by capital marks the point at which exploitation pervades not only socio-economic institutions, but the very bodies, minds, and relationships that constitute life itself; creativity *per se* becomes subsumed under the laws of exchange and measure (Hardt & Negri, 2000). As Virno puts it, "It is here that the virtuoso begins to punch a time card" (2004, p. 56). More theoretically, Hardt and Negri explain the axiomatic under which virtuosity has fallen prey: "the general equivalence of money brings all elements together in quantifiable, commensurable relations" (2000, p. 327). And yet, by mobilizing creativity in total for the pursuit of profit, Empire also mobilizes the movement of desires and possibilities which compromise its very sovereignty: "today productivity, wealth, and the creation of social surpluses take the form of co-operative interactivity through linguistic, communicational, and affective networks. In the expression of its own creative energies, immaterial labour thus seems to provide the potential for a kind of spontaneous and elementary communism" (Hardt & Negri, 2000, p. 294). The political body that is captured by Empire, and which paradoxically also opposes it and overflows it, is named "multitude" (Hardt & Negri, 2000, pp. 60-66)

The work of Deleuze and Guattari (1995) illuminates the tensions between the immanent, desiring-creativity of the multitude and the transcendent plane of Empire's axiomatic, whereby existence includes only that which can turn a profit. For Deleuze and Guattari, the entirety of history and existence is constituted by an analogous battle between "machines"[2] and "structures":

> [Structure] is haunted by a desire for eternity. The machine, on the contrary, is shaped by a desire for abolition. Its emergence is doubled with breakdown, catastrophe – the menace of death. It possesses a supplement: a dimension of alterity which it develops in different forms. This alterity differentiates it from structure, which is based on a principle of

> homeomorphism. (Guattari, 1995, p. 37)

Structures – of which money itself is an example – impose limits on the processual becoming-beyond that is desiring-creation. Machines, on the other hand, do not pin down the flux of becoming and potentiality through signifiers, limits, or borders (Deleuze & Guattari, 1983). Aesthetic machines in particular are subjectivity-producing assemblages that break through structure: "[Performance art] has the advantage of drawing out the full implications of this extraction of intensive, a-temporal, a-spatial, a-signifying dimensions from the semiotic net of quotidianity" (Guattari, 1995, p. 90). Aesthetic machines resist measurement, exchange, and the commodity form: they affirm only productive desire.

Insofar as virtuosity is concerned, then, one type of aesthetic machine might free up the timecard-punching immaterial labourer. This might involve the disruption of the structures of exchange and measure which govern the virtuoso under imperial sovereignty. To put it another way, an aesthetic machine might reveal as contingent (and thus unnatural and unnecessary) capital's extraction of 'unproductive' labour into surplus value. Guattari himself has beautifully and bewilderingly described such a machine:

> Strange contraptions, you will tell me, these machines of virtuality, these blocks of mutant percepts and affects, half-object half-subject, already there in sensation and outside themselves in fields of the possible. They are not easily found at the usual marketplace for subjectivity and maybe even less at that for art; yet they haunt everything concerned with creation, the desire for becoming-other [...]. (1995, p. 92)

So, "machinic virtuosity" is a motley, half-borrowed concept; it describes a performance which breaks beyond measure and affirms creative potential. A machinic virtuoso is an immaterial labourer who forges a way against Empire's axiomatic of exchange.

With machinic virtuosity in mind, the representation of performance in popular culture – what it means to be a virtuoso, to work creatively – deserves closer interrogation, for media and culture are both the subjectivity-producers of Empire and the means by which Empire can be challenged (Dyer-Witheford, 1999; Hardt & Negri, 2004). Games in particular, as de Peuter and Dyer-Witheford have argued, offer a means for subversion and subjective experimentation *contra* Empire: "Interactive games are a ludic exploration of the possibilities of collective human development, up to and including fundamental socio-economic, environmental, and biological alterations" (2005a, http://journal.fibreculture.org/issue5/depeuter_dyerwitheford.html). Although it could be argued that all video games are inherently performative, and so all necessarily engage to some degree with the representation of immaterial labour, the recent genre of musical games such as *Guitar Hero* are overtly so: they beg to be played in front of others. *Rez* is lesser known for its performative dimension, but a unique vibrator-adaptor included with some versions also welcomes witnesses. Further, being 'musical' games – which, as such, narrate immaterial labour and the processes by which it is measured or captured – their stories and rules deal explicitly with the tensions between capital and creativity.

So, to the task at hand: Are Guitar Heroes and Rez-heads (allegorically speaking) captured immaterial labourers, machinic virtuosos, or both?

Guitar Hero

Before plugging in our virtual axes, it might be helpful to consider the traditional electric guitar. With the help of electronic processing equipment, which can infinitely alter the signal of the instrument, an electric guitar can emit a multitudinous array of tones and timbres. I do not mean to fetishize the tonal range of the guitar here. Even if a player were somehow limited to one string, or even one note, virtually endless sonic possibilities can be made actual by changing one's attack or rhythm. This infinite palette, of course, has been used to produce ingeniously mutant universes of sound and texture. Such performances do not need to be authoritatively creative in the Modernist sense in order to be aesthetic machines, for challenging musical assemblages can be found in cover songs perhaps as easily as in 'original' works. An example of a machinic cover might be Jimmy Hendrix's version of "The Star-Spangled Banner":

> When [Hendrix] pushes the song in the direction of electronic noise, as he does once again on "rocket's red glare," the effect is less of a departure from the original melody than an extension of it, albeit a severely disorienting extension [...]. By the time the guitarist converts the single note of "free" into a shrill bit of feedback that descends into a miasma of sound, one has the sense of having heard not just a rendition of the national anthem but a full-fledged reinvention of it, such that the original can never be heard quite the same way again [...]. Hendrix translated the fractitiousness of the war at home and abroad and the damage it did to American patriotism into a war between music and noise that was at once a supreme act of defamiliarization and a stunning political critique. (Waksman, 1999, p. 171)

This analysis of Hendrix's performance easily recalls Guattari's notion of machinic chaosmosis, whereby limits and borders break down through aesthetically-induced, machinic rupture. As Waksman points out, even the original composition crumbles at the hands of the guitarist: "The Star-Spangled Banner," the musician, the audience, and the guitar he holds all become other than themselves.

Guitar Hero's rendition of music-making – of immaterial labour – is of another breed entirely. Like Hendrix's performance of the American national anthem, all music-making in the game is of cover songs. That is, the player does not compose music *per se*, but works to recreate the compositions of others in a 'live' setting. Unlike Hendrix, however, the player of *Guitar Hero* is unable to alter the guitar-shaped controller's signal, or even hit a wrong note (if they wish to remain playing the game). As the simplified scores of hit rock songs scroll towards the player, s/he must respond by precisely 'fretting' and 'strumming' the song's repeating patterns. When the player succeeds, the guitar track of the song is phased into the mix. Many have found this to be affectively enjoyable: to the player who has mastered the game's songs, it feels as though s/he is actually accompanying the virtual band. When the player misses a note, however, or frets the wrong position on the neck, the guitar's channel in the overall mix is disrupted. In place of the crisp sustain of a successfully strummed phrase, the player is punished with a shriek of atonal feedback. If too many notes are missed, the song quickly comes to an end. Imagine if Hendrix's creative deviations from

“The Star-Spangled Banner” had been panned out of Woodstock’s PA system! Such is the condition of musical production in *Guitar Hero*. The player can either conform to the game’s logic by reproducing the requisite hits, which are presented as measurable, stable, complete, and eternal (*structural*), or not play at all.

The player/avatar’s production of affect, the player’s music-making, is comprehensively tabulated by the game. Points are won by the successful completion of the measures which unfold during play. In the story mode, these points are converted into virtual capital; as players ‘win’ gigs, they gain money which they can then exchange for nicer guitars, newer clothes, and so forth. This accompanying narrative perhaps illustrates Empire’s capture of human virtuosity. What is more, *Guitar Hero* transposes capital’s suspicion of that which is beyond measure onto the act of musical performance itself. The play of harmonies sanctioned by the game is exchanged for money, but all tones and rhythms that fall outside *Guitar Hero's* system of measure are not saleable. They are not even audible. This disdain for immanent creativity pervades the entire corpus of the player. As the essentially unalterable scores are imposed, the rhythm of her/his body becomes subject to the incessant (albeit virtual) conversion of affect-production to profit. The player of *Guitar Hero* – if s/he wants to stay in the game – must sway and strum to the metronome of the cash nexus.

Some will suggest that the units of the game that I have been analyzing actually implicate *Guitar Hero* as producer of a newer variety of the one-dimensional subjectivity so well described by the Frankfurt School, for whom “to be entertained means to be in agreement” (Adorno & Horkheimer, 2002, p. 115). This is how critics such as Julian Stallabrass (1996) might choose to consider the game, which does seem to simulate and naturalize the capturing of creative labour. *Guitar Hero*, perhaps like many other video games (cf. Stallabrass, 1996), might be an example of a cultural product that re-creates the logic of social discipline through its very consumption and enjoyment. It is possible that some players will be oppressed by the game. I think it is more likely, however, that the game’s overtly rigid, one-dimensional treatment of musical creativity will be experienced as a challenging critique of the culture industry’s finite subjectivity-production. The game’s cut-scenes alone are saturated with ironic references to the implicit sameness and profit-seeking imperatives of the culture industries. Before the first gig in the story-mode of *Guitar Hero* has even begun, for instance, the player is notified that s/he has landed that all-important first sponsorship deal! With a critical flair akin to the biting film *This is Spinal Tap*, *Guitar Hero* satirically foregrounds the capturing of creativity. Rather than simply ideologically perpetuating imperial logic and the structure of exchange, the game’s treatment of musicianship begs the player to imagine and perform something else: something other.

Although I suggest above that the game’s imposition of meter and exchange disciplines the player’s entire body to accept the logic of Empire’s axiomatic – and on one hand it does just that – the fact that many casual players cannot ‘keep up’ seems to be one of its most enjoyable and community-engendering qualities. To laugh at the inability of newcomers to harness their arms and rhythm according to the game’s logic is to point to worlds beyond structure, measure and exchange. Even the seasoned veteran, perhaps led by the controller’s strap to stand or move, implicates universes of desire and creativity through their affected and affecting performance, which necessarily overflows the game’s point system. This potential fostering of machinic virtuosity is engendered also by the controller’s whammy-bar. The analog-like apparatus allows the player’s tone and its visual representation to be variably altered throughout play. For the whammy bar to be employable, the correct pattern on the guitar's neck must be strummed first (thus to use it at all, one must partake in the rigid play as discussed above); whammy bar play is also captured and measured by the game's point system. Still, the whammy bar might be considered as a site of creative conflict – a tool around which the sheer joys and desires of performance square off against the numbers and values imposed upon the player.

Guitar Hero's production of desiring-other, its virtual engagement with machinic virtuosity, has also begun to express itself outside the consumer-ready through various modifications and hacks. *YouTube* abounds with various clips of people playing new, unauthorized tracks. This shows that some have been inspired, in a modest way perhaps, to reclaim "The Common," as Hardt and Negri propose to call it (2000, p. 300). More interestingly, some particularly determined players have begun to mechanically transform the game's guitar-shaped controller into a digital instrument that can be used outside of the game's confines. Travis Chen explains the impetus behind his own such mod:

> I really would like to first say that I am in no way the first person to have the idea to utilize the Guitar Hero controller outside of the game. There have been a variety of people that have done equally cool work using the Guitar Hero controller. A great summary of these various projects can be found here, http://www.pixelsumo.com/post/guitar-hero-hacks. I especially like the mod that incorporates the buttons into a real guitar! Personally, I really wanted to incorporate the Guitar Hero controller with a live band. (in Kuo, 2006)

The 'one-dimensional' *Guitar Hero*, rather than oppressing its players, has urged (perhaps *forced*) them to create beyond the boundaries it playfully imposes. It is possible that the next batch of Hendrixes will be playing, or even just making, *Guitar Hero* mods.

Rez

If *Guitar Hero* ironically enacts the grim realities of cultural production under capitalism – where richly creative bodies and minds struggle to perform in the narrow way that the logic of the game understands – *Rez*, on the other hand, can be read as an outright simulation of machinic virtuosity. First, I should make it clear that *Rez* is not a 'music' game *per se*. Indeed, it is hard to fit *Rez* into any genre, for the strange work is equal parts side-scroller, 3D shooter, digital music sampler, and mechanical sex toy. It is perhaps for this reason that the game has attracted much popular and academic attention (Wolf, 2003; Wark, 2007). Regarding *Rez's* inherent music-making, however, it seems that not much has been said. Eugenie Shinkle (2005) has written on the game's highly affective play, including its aural properties, but her brief analysis is situated within a larger argument against the validity of the Albertian perspective in game studies. Certainly, the bizarre game lends itself well to all sorts of discussions. Of sole interest to us here, however, will be the rhythmic soundtrack with which the player can intuitively collaborate.

Rez's world is one in which information and knowledge have literally overloaded the AI governance network, ironically titled "Eden." The player's mission is to gain access to the center, a quest which involves maneuvering around and killing a seemingly endless barrage of viruses and firewalls. Player production of percussive sound in *Rez* is a byproduct of defensive counter-attacks against the enemy viruses in the game; ostensibly, the primary objective in *Rez* is to defend the avatar, not to execute digital paradiddles or flans. Still, an infinitely complex, improvisatory musical work develops as one plays the game. When the player presses the action button (which is most immediately used to shoot oncoming foes), a percussive sound is triggered. As the player defends the avatar by targeting the approaching enemies, a rhythmic collage permutates and develops alongside the electronica soundtrack, which necessarily becomes collaboration between the game and the player.

Notably, although the visual outcome of game-play in *Rez* is tabulated, the aural performance is not. To overshoot a virus in the game may be to score a miss as such, but the missed shot will nonetheless trigger a percussive sound. As I was pleasantly surprised to notice upon my first experience with the game, missed shots actually produce an interesting variation in timbre. Thus, complex rhythmic patterns can arise by alternating between hitting and missing the targets as the player desires. Further, although it is possible to 'die' in the standard play-mode of *Rez*, which temporarily puts an end to the music-making, an equally enticing mode of play is 'traveling.' In this more playful, exploratory version of the game, the avatar is not subject to damage; while 'traveling,' the player is free to experience the game's visual and sonic virtual-landscapes.

Rez is a musical-aesthetic machine that allows the player – and audience, who can 'listen' along via an adaptor-vibrator – to behold the processual activity of rhythm. The vibrator even comes with a washable sleeve, allowing it to be used in performances I can only ask my reader to imagine. Although not to the same degree as *Guitar Hero*[3], this game, too, foregrounds performativity by urging one to play music in front of, and along with, others. Yet, it does so without quantifying the experience, which consequently becomes purely virtuosic: a melding of poesis and praxis *less* the structure of exchange. Stamatia Portanova (2007) has written, through a Deleuzian lens, on the differences between meter and rhythm. The former is akin to Guattari's structure, the latter a proper machine:

> Rather than metricising a reiteration of steps, rhythm delineates the elusive character of the body, its molecular self-differentiation, its continuous dis- and re-appearing after all perceptual and spatial changes. At this level, human perception, sensori-motor coordination and cognition are indistinguishable from trance and hallucination [...]. Through rhythm, dance dissolves the system of power and dominance which organises it as an expression and communication of physical potency and as a tool for social control. (Portanova, 2004)

To play *Guitar Hero* is to march (off-beat, perhaps, always a little off-beat) in a sardonically spectacular parade; to play *Rez*, on the other hand, is to dance to the rhythm of the multitude. Whereas *Guitar Hero* satirically simulates the commodification of the virtuoso and the tyrannies of meter and structure, *Rez* virtually frees the player-performer to create sounds beyond measure.

Conclusion

Some may ask, "how can electronic 'art' be considered in the same breath as 'multitude?'" Yet, as Guattari has suggested and as de Peuter's and Dyer-Witheford's work affirms, social and ecological troubles cannot be considered separately from the other universes of thought and action which they necessarily implicate. As Guattari states, “Now more than ever, nature cannot be separated from culture; in order to comprehend the interactions between ecosystems, the mecanosphere and the social and individual Universes of reference, we must learn to think ‘transversally’” (2000, p. 43). Video games are key agents in the postmodern production of subjectivity, both the structural and the machinic types, and video games are at once “games of Empire” and “games of multitude” (De Peuter & Dyer-Witheford, 2005a; 2005b). I have attempted to uncover two of the potentially multitudinous varieties. Under Empire, musical-aesthetic machines will not necessarily be found at the record shop, nor will radical, challenging performance art necessarily be found, for example, at the Dada cabarets of yore: “[Virtual machines] are not easily found at the usual marketplace for subjectivity and maybe even less at that for art; yet they haunt everything concerned with creation, the desire for becoming-other [...]” (Guattari, 1995, p. 92). I propose, then, that we give further “transversal” attention to the musical properties of video games, and vice-versa.

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Footnotes

[1] My analysis is equally applicable to *Guitar Hero 1* and *2*, for their game-play is identical. For the sake of ease, I will write "*Guitar Hero*." Also, although I spent time primarily with the Playstation 2 version of *Guitar Hero 1*, my analysis seems to be valid for all incarnations of the game. Much of it seems to be extendable also to *Rock Band*.

[2] "Machine," in Deleuze and Guattari's thought, describes an ontological category that includes everything that moves, everything that desires, everything that resists limits and borders, everything that engenders possibility: "Everything is a machine" (Deleuze and Guattari, 1983, p. 2). Thus the term in their lexicon provocatively departs from common usage.

[3] *Guitar Hero* can accommodate audiences of varying size, whereas *Rez's* audience seems best limited to one or two. Further, *Guitar Hero's* more mainstream soundtrack is perhaps less exclusive than *Rez's*, which is primarily targeted at rave and trance music cultures. So, although *Rez* grapples more overtly with the former half of "machinic virtuosity," *Guitar Hero* is more concerned with the latter.